



**6450-01-P**

**DEPARTMENT OF ENERGY**

**10 CFR Part 430**

**[EERE-2011-BT-STD-0043]**

**RIN 1904-AC51**

**Energy Conservation Program: Energy Conservation Standards for Miscellaneous Refrigeration Products**

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy.

**ACTION:** Confirmation of effective date and compliance date for direct final rule.

**SUMMARY:** On October 28, 2016, the U.S. Department of Energy (“DOE”) published in the *Federal Register* a direct final rule to establish new energy conservation standards for miscellaneous refrigeration products. DOE has determined that the comments received in response to that direct final rule do not provide a reasonable basis for withdrawing it. Therefore, DOE is providing notice confirming the adoption of the energy conservation standards established in that direct final rule and announces the effective date of those standards.

**DATES:** The direct final rule for miscellaneous refrigeration products published on October 28, 2016 (81 FR 75194) became effective on February 27, 2017. Compliance with the new standards in the direct final rule will be required on October 28, 2019, as set

forth in Table II.1 and Table II.2 in section II of the Supplementary Information section of this document.

**ADDRESSES:** The docket for this rulemaking, which includes *Federal Register* notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials, is available for review at [www.regulations.gov](http://www.regulations.gov). All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

The docket web page can be found at <http://www.regulations.gov/#!docketDetail;D=EERE-2011-BT-STD-0043>. The docket web page contains simple instructions on how to access all documents, including public comments, in the docket.

For further information on how to review the docket, contact the Appliance and Equipment Standards Program staff at (202) 586-6636 or by email: [ApplianceStandardsQuestions@ee.doe.gov](mailto:ApplianceStandardsQuestions@ee.doe.gov).

**FOR FURTHER INFORMATION CONTACT:**

Joseph Hagerman, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE-5B, 1000 Independence Avenue, SW, Washington, DC, 20585-0121. Telephone: (202) 586-4549. Email: [ApplianceStandardsQuestions@ee.doe.gov](mailto:ApplianceStandardsQuestions@ee.doe.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. Authority**

As amended by the Energy Efficiency Improvement Act of 2015, Public Law 114-11 (April 30, 2105), the Energy Policy and Conservation Act (“EPCA” or, in context, “the Act”), Public Law 94-163 (42 U.S.C. 6291–6309, as codified), authorizes DOE to issue a direct final rule establishing an energy conservation standard for a product on receipt of a statement submitted jointly by interested persons that are fairly representative of relevant points of view (including representatives of manufacturers of covered products, States, and efficiency advocates) as determined by the Secretary of Energy (“Secretary”). That statement must contain recommendations with respect to an energy or water conservation standard that are in accordance with the provisions of 42 U.S.C. 6295(o) or 42 U.S.C. 6313(a)(6)(B), as applicable. A notice of proposed rulemaking (“NOPR”) that proposes an identical energy efficiency standard must be published simultaneously with the direct final rule and a public comment period of at least 110 days provided. 42 U.S.C. 6295(p)(4). Not later than 120 days after issuance of the direct final rule, if DOE receives one or more adverse comments or an alternative joint recommendation is received relating to the direct final rule, the Secretary must determine whether the comments or alternative recommendation may provide a reasonable basis for withdrawal under 42 U.S.C. 6295(o) or other applicable law.

When making a determination whether to withdraw a direct final rule, DOE considers the substance, rather than the quantity, of comments. To this end, DOE weighs the substance of any adverse comment(s) received against the anticipated benefits of the

consensus recommendations and the likelihood that further consideration of the comment(s) would change the results of the rulemaking. DOE notes that to the extent an adverse comment had been previously raised and addressed in the rulemaking proceeding, such a submission will not typically provide a basis for withdrawal of a direct final rule. If the Secretary makes such a determination, DOE must withdraw the direct final rule and proceed with the simultaneously published NOPR. DOE must publish in the *Federal Register* the reasons why the direct final rule was withdrawn.

DOE determined that it did not receive any adverse comments providing a basis for withdrawal as described above for the direct final rule that is the subject of this document -- miscellaneous refrigeration products (“MREFs”). As such, DOE did not withdraw this direct final rule and allowed it to become effective. Although not required under EPCA, DOE customarily publishes a summary of the comments received during the 110-day comment period and its responses to those comments.<sup>1</sup> This document contains such a summary, as well as DOE’s responses to those comments.

## **II. Miscellaneous Refrigeration Products Direct Final Rule**

### **A. Background**

During the rulemaking proceeding to consider new energy conservation standards for MREFs, DOE received a statement submitted by an Appliance Standards and Rulemaking Federal Advisory Committee (“ASRAC”) negotiated rulemaking working group for MREFs (the “MREF Working Group” or, in context, the “Working Group”).

---

<sup>1</sup> See, e.g., Notice of effective date and compliance dates for direct final rule, 76 FR 67037 (Oct. 31, 2011).

The MREF Working Group consisted of 15 members, including two members from ASRAC and one DOE representative, with the balance comprising representatives of manufacturers of the covered products at issue, efficiency advocates, and a utility representative. The MREF Working Group submitted to ASRAC two Term Sheets, one of which contained recommendations with respect to new energy conservation standards for MREFs that, in the commenters' view, would satisfy the EPCA requirements at 42 U.S.C. 6295(o), and ASRAC subsequently adopted these consensus recommendations. (See "MREF Term Sheet", EERE-2011-BT-STD-0043-0011).

Pursuant to 42 U.S.C. 6295(p)(4), the Secretary must determine whether a jointly submitted recommendation for an energy or water conservation standard is in accordance with 42 U.S.C. 6295(o) or 42 U.S.C. 6313(a)(6)(B), as applicable. As stated in the direct final rule, this determination is exactly the type of analysis DOE conducts whenever it considers potential energy conservation standards pursuant to EPCA. DOE applies the same principles to any consensus recommendations it may receive to satisfy its statutory obligation to ensure that any energy conservation standard that it adopts achieves the maximum improvement in energy efficiency that is technologically feasible and economically justified and will result in significant conservation of energy. Upon review, the Secretary determined that the consensus recommendations submitted in the MREF Term Sheet comports with the standard-setting criteria set forth under 42 U.S.C. 6295(o). Accordingly, the consensus recommendation efficiency levels, included as trial standard level ("TSL") 2 for coolers and TSL 1 for combination cooler refrigeration products,

were adopted as the new standard levels in the direct final rule. 81 FR 75194, 75252–75256 (Oct. 28, 2016).

As the relevant statutory criteria were satisfied, the Secretary adopted the new energy conservation standards for MREFs set forth in the direct final rule. These standards, which are expressed in maximum allowable annual energy use (“AEU”) in kilowatt-hours per year (“kWh/yr”) as a function of the calculated adjusted volume (“AV”) in cubic feet (“ft<sup>3</sup>”), are set forth in Table II.1 and Table II.2. The standards will apply to all products listed in Table II.1 and Table II.2 that are manufactured in, or imported into, the United States starting on October 28, 2019. For a detailed discussion of DOE’s analysis of the benefits and burdens of the new standards pursuant to the criteria set forth in EPCA, please see the direct final rule. 81 FR 75194 (Oct. 28, 2016).

As required by EPCA, DOE also simultaneously published a NOPR proposing the identical standard levels contained in the direct final rule. 81 FR 74950 (Oct. 28, 2016). DOE considered whether any comment received during the 110-day comment period following the direct final rule was sufficiently “adverse” as to provide a reasonable basis for withdrawal of the direct final rule and continuation of this rulemaking under the NOPR. DOE subsequently determined that it did not receive any adverse comments that would provide a reasonable basis for withdrawal.

**Table II.1: Energy Conservation Standards for Coolers**

Product Class	Maximum Allowable AEU (kWh/yr)
Built-in Compact	$7.88AV^{\dagger} + 155.8$
Built-in	
Freestanding Compact	
Freestanding	

<sup>†</sup> AV = Adjusted volume, in ft<sup>3</sup>, as calculated according to title 10 of the Code of Federal Regulations (“CFR”) part 430, subpart B, appendix A (Appendix A).

**Table II.2: Energy Conservation Standards for Combination Cooler Refrigeration Products**

Product Class Description	Product Class Designation*	Maximum Allowable AEU (kWh/yr)
Cooler with all-refrigerator—automatic defrost	C-3A	$4.57AV^{\dagger} + 130.4$
Built-in cooler with all-refrigerator—automatic defrost	C-3A-BI	$5.19AV + 147.8$
Cooler with upright freezers with automatic defrost without an automatic icemaker	C-9	$5.58AV + 147.7$
Built-in cooler with upright freezer with automatic defrost without an automatic icemaker	C-9-BI	$6.38AV + 168.8$
Cooler with upright freezer with automatic defrost with an automatic icemaker	C-9I	$5.58AV + 231.7$
Built-in cooler with upright freezer with automatic defrost with an automatic icemaker	C-9I-BI	$6.38AV + 252.8$
Compact cooler with all-refrigerator—automatic defrost	C-13A	$5.93AV + 193.7$
Built-in compact cooler with all-refrigerator—automatic defrost	C-13A-BI <sup>††</sup>	$6.52AV + 213.1$

\* These product classes are consistent with the current product classes established for refrigerators, refrigerator-freezers, and freezers. 10 CFR 430.32.

<sup>†</sup> AV = Adjusted volume, in ft<sup>3</sup>, as calculated according to 10 CFR part 430, subpart B, appendix A.

<sup>††</sup> There is no current product class 13A-BI for refrigerators, refrigerator-freezers, or freezers.

## B. Comments on the MREF Direct Final Rule

As discussed in section I of this document, not later than 120 days after issuance of the direct final rule, if DOE receives either (1) one or more adverse comments or (2) an alternative joint recommendation relating to the direct final rule within the prescribed 110-day comment period, the Secretary must determine whether the comments or alternative recommendation may provide a reasonable basis for withdrawal under 42 U.S.C. 6295(o) or other applicable law.

Of the five substantive comments received in response to the direct final rule, four were from interested parties supporting the standard levels specified in the direct final rule as well as the process used to develop those standards. (All comments are available for public viewing at <https://www.regulations.gov/docket?D=EERE-2011-BT-STD-0043>.) Among these commenters, three (two manufacturers and an industry trade group) stated that the direct final rule standards would support the industry's goal of achieving a national marketplace for MREFs, prevent a patchwork of State regulations, and allow for future harmonization with Canadian regulations.<sup>2</sup>

Another interested party submitted comments questioning the product classes, standards, and analysis included in the direct final rule. The following sections discuss these specific comments and DOE's determination that the comments do not provide a reasonable basis for withdrawal of the direct final rule.

---

<sup>2</sup> DOE also received one comment from an individual that asked which two rules DOE was withdrawing to implement the direct final rule. See Docket No. EERE-2011-BT-STD-0043-0127. This comment appears to refer to a recent Executive Order that instructs Federal agencies to withdraw two regulations for each new regulation they issue. See 82 FR 9339 (Feb. 3, 2017) (Executive Order 13771 – “Reducing Regulation and Controlling Regulatory Costs”). The comment seeks clarification as to which rules DOE will withdraw and generally notes the need to rein in “regulatory overkill” by the Federal government. Because this direct final rule had already been issued three months prior to the Executive Order's signing, this rule falls outside of its scope. This document serves solely to confirm the direct final rule's applicable compliance date.



## 1. Product Classes

The interested party who criticized the rule commented that the product class structure and corresponding standards for coolers as specified in the direct final rule are not reasonable. It stated that vapor-compression products (i.e. those products using a compressor/condenser-based system) differ significantly from other non-compressor refrigeration products, such as thermoelectric (i.e. semiconductor-based) or absorption refrigeration products, in terms of testing and energy efficiency. Accordingly, in its view, DOE's rule should have included additional product classes to account for these differences. As an example of this approach, the interested party noted that the European Union's Energy Efficiency Directive No. 643/2009 and testing standard EN 62552-2013 include separate energy efficiency requirements for vapor-compression and non-compressor refrigeration products.

As discussed in the direct final rule, DOE considered whether separate product classes for non-compressor products were appropriate throughout this rulemaking. In the preliminary analysis, DOE did not identify any unique consumer utility associated with non-compressor refrigeration systems that would justify separate product classes for these products. The MREF Working Group discussed the topic of product classes, and agreed with DOE's determination from the preliminary analysis. Following the Working Group recommendation, DOE sought additional information regarding the consideration of non-compressor products in a notice of data availability ("NODA"). 80 FR 77589 (Dec. 15, 2015). DOE did not receive any information in response to the NODA indicating that

separate non-compressor product classes would be justified. Consequently, in the absence of any information supporting the creation of non-compressor-based classes, DOE adopted the approach recommended by the Working Group, which led to the creation of the specific product classes detailed in the direct final rule. See 81 FR 75194, 75196 (Oct. 28, 2016). See also *id.* at 75209 (explaining the basis for the specific classes adopted by DOE).

While DOE acknowledges that non-compressor products differ from vapor-compression refrigeration products, DOE was unable to determine any basis on which separate product classes for non-compressor products would be appropriate. Under 42 U.S.C. 6295(q), DOE may establish product classes for groups of products that either: (1) consume a different kind of energy from that consumed by other covered products; or (2) have a capacity or other performance-related feature which other covered products do not have, and such feature justifies a higher or lower standard from that which applies to other covered products. Non-compressor products consume electric energy input, as do vapor-compression products. DOE is also not aware of any performance-related feature associated with non-compressor products that vapor-compression products do not also offer. Accordingly, DOE maintains its determination in the direct final rule that separate product classes for non-compressor products are not appropriate.

## 2. Cooler Standard

The interested party also argued that the test methods for built-in and freestanding products should be different, with built-in products tested in an enclosure leading to

higher energy consumption, and therefore a single maximum allowable AEU is not appropriate for both freestanding and built-in cooler product classes.

The MREF test procedures in 10 CFR Part 430, Subpart B, Appendix A (“Appendix A”) require that both freestanding and built-in products be tested in a freestanding configuration. Accordingly, Appendix A does not specifically lead to higher energy consumption for built-in products compared to freestanding products. Further, the standard levels specified in the direct final rule are consistent with those recommended by the MREF Working Group. The Working Group included multiple manufacturers, including manufacturers of built-in products, who determined that the same maximum AEU was appropriate for both built-in and freestanding coolers. Therefore, DOE has determined that the single maximum allowable AEU is appropriate for both freestanding and built-in coolers. Should DOE receive information in the future demonstrating that the test procedure requires modification to better address built-in products, DOE may revisit the test procedure at that time.

The interested party also commented that the cooler standard outlined in the direct final rule is too stringent. It compared the direct final rule standard level equation for coolers to the equation previously established by the California Energy Commission (“CEC”) for coolers sold in California, and concluded that the direct final rule standard is 50 percent more stringent than the CEC regulation. It further stated that the direct final rule standards would reduce the number of MREFs in the market.

DOE notes that the standards specified in the direct final rule and those in the CEC regulations are not directly comparable because they are based on energy consumption measured by different test procedures. Most significantly, the DOE test procedure in Appendix A applies a correction factor of 0.55 to the measured energy consumption of coolers to account for typical household usage. The test procedure used for the CEC regulations applies a usage factor of 0.85. Accounting for this difference alone, the DOE standard level from the direct final rule is equivalent to approximately 70 percent of the maximum allowable energy use in the CEC regulations. DOE observed that many coolers already achieve this efficiency level, including a non-compressor cooler tested by a third party in support of DOE's analysis, and that manufacturer recommendations from the Working Group supported a cooler standard at this level. Therefore, DOE concludes that the cooler standard is not too stringent and not likely to limit consumer purchasing options.

### 3. Analysis Periods

The interested party commented that for coolers at TSL 2, DOE forecasted results over the lifetime of products from 2019 to 2048, while the other TSLs considered the period from 2021 to 2050. Similarly, it noted that for combination cooler refrigeration products, DOE analyzed TSL 1 results over the lifetime of products from 2019 to 2048, and all other TSLs over the period from 2021 to 2050. The commenter noted that due to the different analysis periods used by DOE, the economic analysis and data comparing the different TSLs are unjust and unequal, leading to inaccurate economic analysis conclusions.

In the direct final rule, DOE analyzed TSLs other than TSL 2 for coolers and TSL 1 for combination cooler refrigeration products based on the 5-year compliance period typically provided when DOE establishes the first energy conservation standards for newly covered products. However, because TSL 2 for coolers and TSL 1 for combination cooler refrigeration products were based on the standard levels and compliance period recommended by the MREF Working Group, DOE analyzed a 3-year compliance period for these TSLs only. DOE's analysis for each TSL considered the 30-year period following the standards compliance date, so TSLs based on the Working Group recommendation considered the analysis period from 2019 to 2048, while the analysis period for the other TSLs was 2021 to 2050. In its analysis, DOE discounted future impacts to the year of the analysis, which allowed for a direct comparison of the projected impacts for each TSL despite the different compliance years and 30-year analysis periods. See chapter 10 of the direct final rule technical support document for a description of the national impact analysis. Therefore, DOE has determined that its conclusions are valid and provide sufficient support for the efficiency levels adopted in the direct final rule.

#### 4. Product Lifetimes

The interested party also requested clarification regarding the lifetimes of products assumed in the national impact analysis. It commented that a 30-year product lifetime would be too long, and suggested that DOE use a lifetime of approximately 12 years for products such as wine coolers.

In the direct final rule analysis, DOE did not assume a 30-year product lifetime; rather, it analyzed products sold over a 30-year period with a distribution of lifetimes. For full-size products (both coolers and combination cooler refrigeration products), DOE estimated a 17.4-year average lifetime, consistent with the average lifetime for full-size refrigerators and freezers. For compact products, DOE estimated a 10.3-year average lifetime based on manufacturer input. See 81 FR at 75219 and chapter 8, section 8.2.2.5 of the direct final rule technical support document. DOE maintains that these lifetime estimates are appropriate because they were supported by manufacturer feedback in the MREF Working Group.

### **III. Department of Justice Analysis of Competitive Impacts**

EPCA directs DOE to consider any lessening of competition that is likely to result from new or amended standards. It also directs the Attorney General of the United States (“Attorney General”) to determine the impact, if any, of any lessening of competition likely to result from a proposed standard and to transmit such determination to the Secretary within 60 days of the publication of a proposed rule, together with an analysis of the nature and extent of the impact. (42 U.S.C. 6295(o)(2)(B)(i)(V) and (B)(ii)) For the direct final rule discussed in this document, DOE published a NOPR containing energy conservation standards identical to those set forth the direct final rule and transmitted a copy of the direct final rule and the accompanying technical support document (“TSD”) to the Attorney General, requesting that the U.S. Department of

Justice (“DOJ”) provide its determination on this issue. DOE has published DOJ’s comments at the end of this document.

DOJ reviewed the new standards in the direct final rule and the direct final rule TSD discussed in this document. As a result of its analysis, DOJ concluded that the new standards issued in the direct final rule are unlikely to have a significant adverse impact on competition. DOJ further noted that the standards established in the direct final rule were the same as recommended standards submitted in the consensus recommendations signed by industry participants who believed they could meet the standards (as well as other interested parties).

#### **IV. Social Cost of Carbon**

DOE notes that the direct final rule discussed in this document preceded Executive Order 16093’s requirement to revise future analyses involving carbon monetization. See 82 FR 16093 (March 31, 2017). The direct final rule included an analysis that examined the impacts associated with the social cost of carbon. These values, which were ancillary to the primary analyses that DOE conducted to determine whether the standards adopted in the rule were justified under the statutory criteria prescribed under 42 U.S.C. 6295(o), did not change the results of DOE’s analyses. Accordingly, while the inclusion of these values helped in providing additional detail regarding the impacts from the rule, those details played no role in determining the outcome of DOE’s decision under EPCA.

## **V. National Environmental Policy Act**

Pursuant to the National Environmental Policy Act of 1969 (“NEPA”), DOE has determined that this direct final rule fits within the category of actions included in Categorical Exclusion (“CX”) B5.1 and otherwise meets the requirements for application of a CX. See 10 CFR part 1021, App. B, B5.1(b); 1021.410(b) and Appendix B, B(1)–(5). This rule fits within the category of actions because it is a rulemaking establishing energy conservation standards for consumer products or industrial equipment, and for which none of the exceptions identified in CX B5.1(b) apply. Therefore, DOE has made a CX determination for this rulemaking, and DOE does not need to prepare an Environmental Assessment or Environmental Impact Statement for it. DOE’s CX determination applying to this direct final rule is available at <http://energy.gov/nepa/categorical-exclusion-cx-determinations-cx>.

## **VI. Conclusion**

In summary, based on the discussion above, DOE has determined that the comments received in response to the direct final rule for new energy conservation standards for MREFs do not provide a reasonable basis for withdrawal of the direct final



rule. As a result, the energy conservation standards set forth in that direct final rule became effective on February 27, 2017. Compliance with the standards articulated in that direct final rule is required on October 28, 2019.

Issued in Washington, DC, on May 22, 2017.

---

Daniel R Simmons  
Acting Assistant Secretary  
Energy Efficiency and Renewable Energy

## Appendix

[The following letter from the Department of Justice will not appear in the Code of Federal Regulations.]

U.S. DEPARTMENT OF JUSTICE  
Antitrust Division  
Renata B. Hesse  
Acting Assistant Attorney General  
RFK Main Justice Building  
950 Pennsylvania Avenue, N.W.  
Washington, D.C. 20530-0001  
(202)514-2401 / (202)616-2645 (Fax)

December 27, 2016

Daniel Cohen  
Assistant General Counsel for Legislation, Regulation and Energy Efficiency  
Department of Energy  
Washington, DC 20585

Re: Docket No. EERE-2011-BT-STD-0043

Dear Assistant General Counsel Cohen:

I am responding to your letter of October 28, 2016 seeking the views of the Attorney General about the potential impact on competition of proposed energy conservation standards for miscellaneous refrigeration products (MREFs).

Your request was submitted under Section 325 (o)(2)(B)(i)(V) of the Energy Policy and Conservation Act, as amended (EPCA), 42 U.S.C. § 6295(o)(2)(B)(i)(V), which requires the Attorney General to make a determination of the impact of any lessening of competition that is likely to result from the imposition of proposed energy conservation standards. The Attorney General's responsibility for responding to requests from other departments about the effect of a program on competition has been delegated to the Assistant Attorney General for the Antitrust Division in 28 CFR § 0.40(g).

In conducting its analysis, the Antitrust Division examines whether a proposed standard may lessen competition, for example, by substantially limiting consumer choice or increasing industry concentration. A lessening of competition could result in higher prices to manufacturers and consumers.

We have reviewed the proposed standards contained in the Notice of Proposed Rulemaking and the Direct Final Rule (81 Fed. Reg. 74950 and 75194, Oct. 28, 2016), and the related Technical Support Document. We have also reviewed the transcript of the public meeting held on the proposed standards on January 9, 2015, and public comments filed with the Department of Energy, and conducted interviews with industry representatives.

Based on the information currently available, we do not believe that the proposed energy conservation standards for MREFs are likely to have a significant adverse impact on competition.

Very truly yours,  
Renata B. Hesse

[FR Doc. 2017-10867 Filed: 5/25/2017 8:45 am; Publication Date: 5/26/2017]